

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **Cheng Chung WANG**

Filed: **8/25/2003**

Appl. No.: **10/647,814**

Examiner: **Freay, Charles**

Conf. No.: **2353**

Art Unit: **3746**

Title: **INFLATABLE PRODUCT HAVING AN ELECTRICAL INFLATOR**

Date: **APRIL 22, 2010**

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL TO THE BOARD

Sir:

Real Party in Interest

The assignee of Serial No. 10/647,814 (hereinafter "the '814 application"), and thus the real party in interest in this appeal, is Team Worldwide Corporation, 9F., No. 24, Songzhi Rd., Xinyi District, Taipei City 110, Taiwan R.O.C.

Related Appeals and Interferences

U.S. Patent No. 6,793,469: United States District Court, District of Columbia, Civ. A. No. 1:04 CV 01785, *Intex Recreation Corp. v. Team Worldwide Corporation v. Intex Recreation Corp.*, pending.

Control No. 90/009,926: Appeal Brief filed on May 4, 2009.

Appeal 2008-0762: Decided July 28, 2008

Status of Claims

Claims 2-3 and 6-8 are finally rejected.

Status of Amendments

An amendment canceling claim 8 is filed herewith, and has not yet been acted upon by the Examiner.

Summary of Claimed Subject MatterClaim 2

Independent claim 2 is directed to an inflatable product. The inflatable product includes an inflatable body and a socket built in the inflatable body. For example, see the Abstract, page 7, line 21 to page 8, line 1 and Fig. 8A, 40 and 46. An electric pump (Fig. 8A, 42), including a pump body and an air outlet (Fig. 8A, 425), connected to the socket to pump the inflatable body, wherein the pump body is wholly or partially located in the socket. For example, see page 9, lines 3-10, Figs. 8E-8F. Also see, for example, Figs. 6B, 7B and 13A-B.

Grounds of Rejection to be Reviewed on Appeal

Whether claims 2 and 5 are unpatentable under 35 U.S.C. 102(b) over Adams, III (US 4,862,533, hereinafter "Adams").

Whether claims 2 and 5 are unpatentable under 35 U.S.C. 102(b) over Owen et al (US 4,678,014, hereinafter "Owen").

Whether claims 2, 5 and 7 are unpatentable under 35 U.S.C. 102(b) over Chaffee (US 6,237,653, hereinafter "Chaffee").

Whether claims 2 and 5 are unpatentable under 35 U.S.C. 102(b) over Rey (US 5,503,617, hereinafter “Rey”).

Whether claims 6 is unpatentable under 35 U.S.C. 103(a) in view of any one of Adams, Owen, Chaffee or Rey.

Argument

Claim 2 recites an inflatable product including:

- an inflatable body;
- a socket built in the inflatable body; and
- an electric pump, including a pump body and an air outlet, connected to the socket to pump the inflatable body, wherein the pump body is wholly or partially located in the socket.¹

For the reasons as set forth in detail in the following section, it is Applicant’s view that the term “pump body,” as recited in claim 2, means the main part of electric pump, as opposed to the air outlet portion of the electric pump.

The Examiner agrees that the “pump body” refers to the main part of the electric pump, but argues that the air outlet portion is also a part of the pump body. See the Final Rejection mailed on October 23, 2009 (hereinafter “the Final Rejection”), at page 5.

¹ One advantage of the arrangement recited in claim 2 is that to the extent that the pump body is located in the socket, the amount of space outside the inflatable body occupied by the pump body is reduced. For example, in the embodiment in which the pump body is *wholly* located in the socket, little if any of the pump is outside the inflatable body, reducing the need for external structure to house or support the pump, and also reducing the external exposure and visibility of the pump.

1. Claim Construction

Claims are to be construed in accordance with the intrinsic evidence comprising the claims themselves, the prosecution history, and the specification, as well as permissible extrinsic evidence such as dictionaries. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*). In particular, claim terms must be construed in the “context of the particular claim” in which it appears. *Id.* at 1326.

The term “pump body” has not been specially or expressly defined in the specification. Accordingly, under MPEP 2111.01.III: “In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art.”

MPEP 2111.01.III also sets forth guidelines for ascertaining this ordinary and customary meaning, in accordance with the requirements established by the Federal Circuit in *Phillips*:

III. < “PLAIN MEANING” REFERS TO THE ORDINARY AND CUSTOMARY MEANING GIVEN TO THE TERM BY THOSE OF ORDINARY SKILL IN THE ART

....

The ordinary and customary meaning of a term may be evidenced by a variety of sources, >including “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.”< *Phillips v. AWH Corp.*, *>415 F.3d at 1314<, 75 USPQ2d **>at 1327.< If extrinsic reference sources, such as dictionaries, evidence more than one definition for the term, the intrinsic record must be consulted to identify which of the different possible definitions is most consistent with applicant’s use of the terms. *Brookhill-Wilk 1*, 334 F. 3d at 1300, 67 USPQ2d at 1137; see also *Renishaw PLC v. Marposs Societa*” per *Azioni*, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998)

1.1. Applicant's Construction of "Pump Body"

1.1.1. Claim Language

Applicant submits that, when the term is interpreted in accordance to the guidelines set forth in *Phillips* and MPEP 2111.01(III), the ordinary and customary meaning of "pump body" is the main part of the pump.²

Furthermore, claim 2 plainly distinguishes the pump body from the air outlet. In this regard, claim 2 introduces the claim term "pump body" with the language "an electric pump including ... a pump body **and** an air outlet" [emphasis added], language that clearly defines the "pump body" and "air outlet" as separate subparts of the electric pump. In particular, when construed in the context of the surrounding claim language, the "pump body" specifically excludes the "air outlet" of the electric pump.³

This clear meaning of the claim is underscored by other language in the claims. For example, the claims expressly recite that the electric pump is "connected to the socket to pump the inflatable body." Thus, any part of the electric pump can be connected to the socket. However, the claim goes on to say that the pump body of the electric pump, i.e., a previously recited subpart of the electric pump, is "wholly or partially located in the socket." The claims do not impose any requirement that any other subpart of the electric pump (for example, the air outlet) be wholly or partially located in the socket.

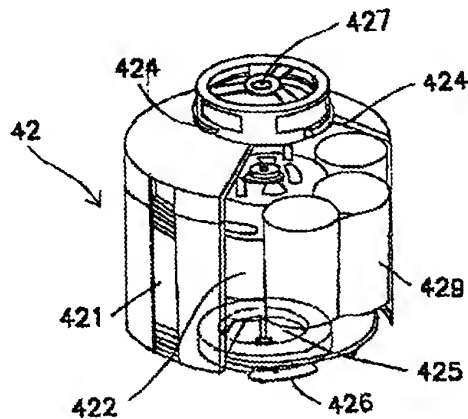
² See *The American Heritage Dictionary of the English Language* (2000) (defining "body" as "[t]he main or central part."); *Webster's Ninth New Collegiate Dictionary* (1991) (defining "body" as "[t]he main, central, or principal part.>").

³ "[T]he surrounding claim language generally provides an important consideration for construing a particular term within a claim." *Black & Decker, Inc. v. Robert Bosch Tool Corp.*, Civ. App. 2007-1243, 2008 WL 60501 (Fed. Cir. Jan. 7, 2008) (unpublished).

1.1.2. Specification

The straightforward distinction drawn in the claim language between the “pump body” and the “air outlet” as separate components of the “electric pump” as a whole is in accordance with and readily apparent from the specification.

As an example, Fig. 8B of the application is reproduced below:



As described on page 8, lines 14-16, the air outlet 425 is a separate portion of the housing of the electric pump 42:

Furthermore, at the ends of the electric pump 42 are provided a protruding air inlet 427 and a protruding air outlet 425.

Thus, the “electric pump” 42 clearly encompasses an “air outlet” (in this embodiment, protruding air outlet “425”). The claims recite an “electric pump” including a “pump body” **and** an “air outlet.” Applying the ordinary and customary meaning of “pump body,” the “main part or central part” of electric pump 42 in this embodiment is quite simply the part between air inlet 427 and air outlet 425 shown in Fig. 8B.

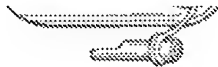
1.1.3. Prosecution History

As set forth in MPEP 2111.01(III), the “ordinary and customary meaning” of a term may also be established through reference to the prosecution history.

The prosecution history, and in particular the use of the term “pump body” by the Applicant and the Examiner during the prosecution of parent Application No. 09/738,331 (now US Patent No. 6,793,469, hereinafter “the ‘469 patent”) further confirms Applicant’s proposed construction of the term as the main part of the pump, and a part of the electric pump distinct from the “air outlet.”

Several of the prior art patents cited in connection with the prosecution of the ‘469 patent disclose an air nozzle. The claims were amended to recite that the “electric pump” includes a “pump body” and “air outlet” for the express purpose of overcoming prior art in which the air outlet, as opposed to the pump body, was the portion of an electric pump inserted into a socket.

This prior art was Feldman (US 5,890,882), applied to reject the originally filed claims, which discloses, *inter alia*:



In the rejection, the previous Examiner argued that adaptor 38 was a portion of the electric pump and inflation valve 52 was a socket. Office action dated February 11, 2003, page 4.

In a response filed on July 11, 2003, Applicant amended the claims to include the requirements that (1) the electric pump “includ[es] a pump body and an air outlet,” (2) “wherein the pump body is wholly or partially located in the socket.” Applicant’s accompanying remarks explained that since Feldman’s pump body is the portion labeled “2,” and this portion is not wholly or partially located in the valve 52, it does not render the amended claims unpatentable.

In a subsequent interview, the previous Examiner apparently agreed with this distinction (Interview Summary dated July 30, 2003, continuation sheet):

[I] informed Nelson Quintero that the amended claims required an electric pump with a pump body wholly or partially located inside a socket. Further I informed Nelson Quintero that the remark section of the amendment clearly brought out that the amended claims ***now defined the pump body, is in addition to the pump’s discharge nozzle.*** [Emphasis added.]

Thus, the express distinction drawn in the claims between “pump body” and “air outlet”—as two separate features of the “electric pump,” with the former being used in its ordinary sense of the main part of the pump—was made by amendment in the prosecution of the parent to this application. In this regard, Applicant submits that the previous Examiner’s conclusion that the “air outlet” nozzle 38 is separate and distinct from the “pump body” of the electric pump further evidences the ordinary and customary meaning of, and thus also Applicant’s proposed constructions for, these terms.⁴

⁴ On page 7 of the Final Rejection, the Examiner states: “[t]he current examiner interprets such a statement to mean that with regards to Feldman the nozzle 38, as shown in Fig. 3 of the Feldman reference, is a separate element.” Applicant agrees that nozzle 38 is a separate element of the Feldman’s electric pump relative to the pump body. As noted above, the previous Examiner’s position of record was that nozzle 38 was a part of the electric pump. Applicant amended the claims to further define the electric pump as having a pump body and an air outlet. Only the “air outlet” portion 38 of Feldman’s electric pump is located in the alleged “socket.”

In the same interview, the Examiner referenced Fig. 2 of US 5,267,363, also to Chaffee, which illustrates a battery powered inflation device 20 including a housing 26 connected to valve 12 of mattress 10 by screw threads 27 provided on the mouth region 28 of the housing. Fig. 2 of US 5,267,363 is reproduced below:

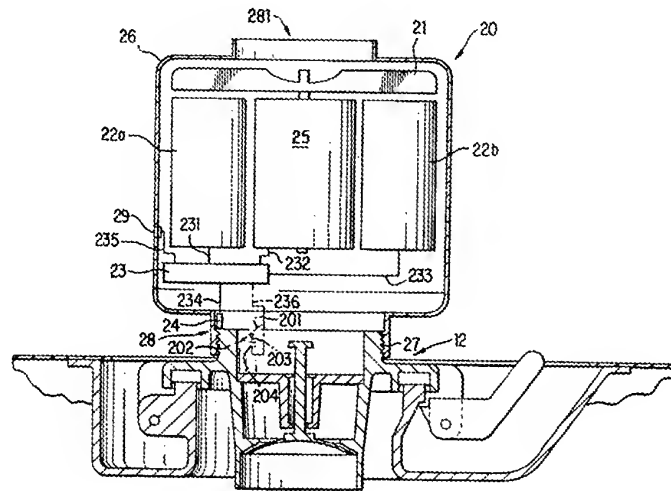


FIG. 2

As shown in the figure, the mouth region 28 of the housing forms a neck portion projecting away from the “body” of inflation device 20. In the Interview Summary, the Examiner stated: “even if Chaffee’s pump had internal threads, **the pump body would not be inside the socket.**” [Emphasis added.]

As further shown in Fig. 3 of Chaffee, the valve assembly 12 protrudes slightly from the wall of mattress 10. As shown in Fig. 2 of Chaffee, the “air outlet” 28 is threaded to the outside of valve 12, as is therefore clearly not “located in” said valve. The previous Examiner’s comments clearly indicate that even if this arrangement were reversed, and the “air outlet” 28 were threaded interior to valve 12, the “pump body” would not be inside the socket.

In other words, the previous Examiner clearly distinguished between the “air outlet” and “pump body” portions of Chaffee’s pump. In particular, the previous Examiner

concluded that the “air outlet” mouth region 28 is not a part of the “pump body,” *even though it is a portion of housing 26.*⁵

Applicant therefore respectfully submits that the prosecution of the ‘469 patent further confirms that, in full accord with its ordinary and customary meaning, the term “pump body” excludes “air outlets” such as the adaptor 38/transition structure 50 in Feldman, and the neck of housing 26 in Chaffee US 5,267,363.

1.2 The Examiner’s Interpretation

In the Final Rejection mailed on October 23, 2009, the Examiner argues (at page 5):

The Examiner argues that a pump body can and often does define the outlet and include it.

However, the Examiner provides no intrinsic or extrinsic evidence in support of this contention, which is essentially the lynchpin of the rejections over Adams, Owen and Chaffee. The subsequent references to this point on pages 5-12 of the office action are simply restatements of this contention, and include no reference to intrinsic or extrinsic evidence in support thereof.⁶

⁵ At page 8 of the Final Rejection, the current Examiner argues that “the [previous] examiner’s statement could equally have been that even if the pump body 28 had internal threads, the pump body would not be inside the socket” on the basis that only lower recessed portion 33 is the “socket” in the arrangement of Figs. 2 and 3 of Chaffee. However, the scope of the claim term “socket” was not being addressed in the interview summary. The only difference that internal or external threading of the mouth portion 28 would make to the arrangement shown in Fig. 2 is whether mouth portion 28 would be inside or outside the protruded portion of the valve 12.

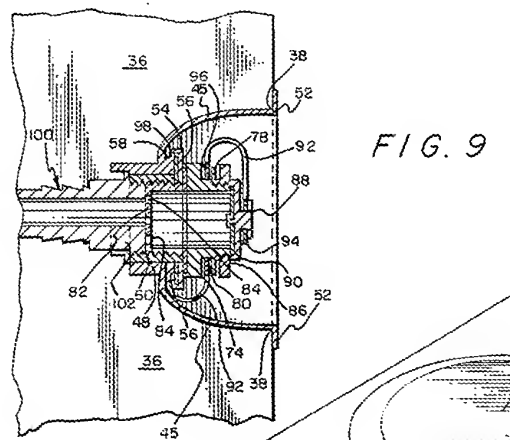
⁶ For example, on page 5, “[i]n fact the whole outer wall in Fig. 8B is the pump body, including the portion defining the outlet.” Or, on pages 6 and 7, “where the whole center section 42 including the end wall defining the outlet 425 is part of the pump body.”

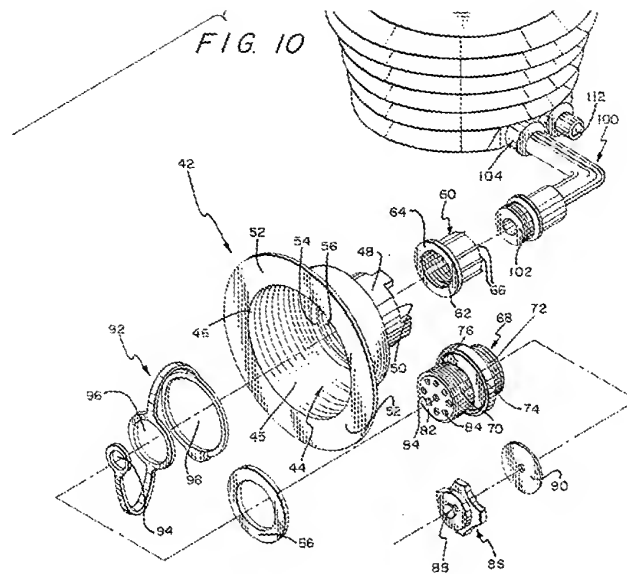
2. Rejection of Claims 2 and 5 over Adams

The rejection of a claim for anticipation under 35 U.S.C. §102 requires that the prior art reference include every element of the rejected claim. Furthermore, as stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention “arranged as in the claim.” *Lindermann Maschinenfabrik GMBH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984).

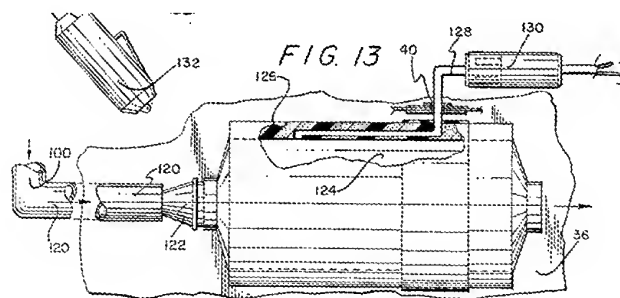
Adams teaches an inflatable air mattress 20 including “a totally enclosed mattress structure or housing 36 having an air intake aperture 38 and in one preferred embodiment of the invention, a cord inlet/outlet aperture 40.” Col. 3, lines 25-28. Either a bellows pump 108 (Fig. 10) or a motor means 124 (Figs. 11-13) is disposed entirely interior to housing 36, wherein an air inlet of the bellows or electric pump is connected to air intake aperture 38 via a series of air piping elements 122/120/100/44, where bowl member 44 is fitted in aperture 38. In the electric pump embodiment, a pad 126 surrounds the motor means. Adams identifies the combined structure of the motor means 124 (or bellows pump 108) and the air piping elements 122/120/100/44 as “pump means 42.”

Figs. 9 and 10 are reproduced below:

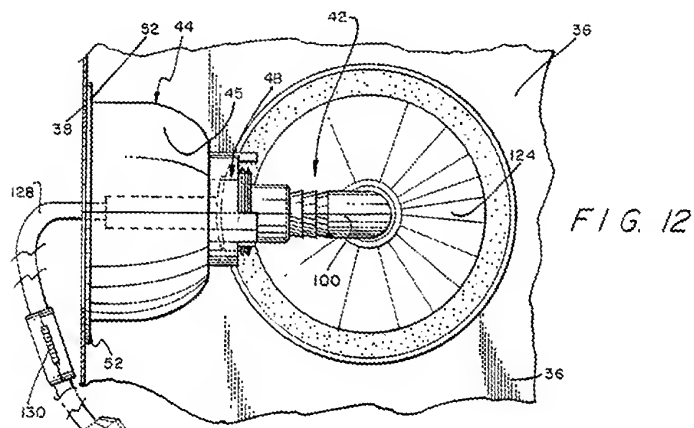
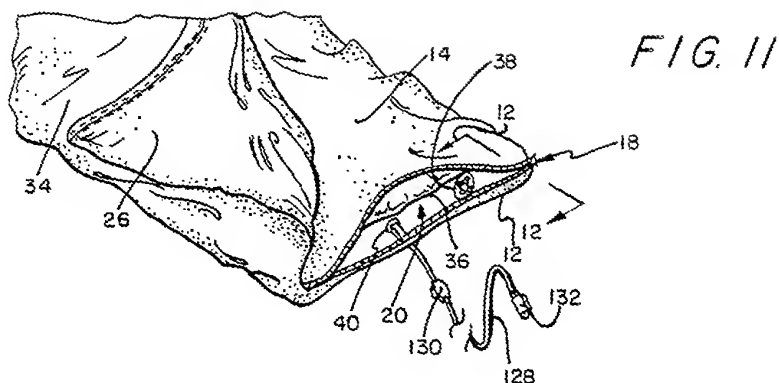




As illustrated, elbow means 100 is connected to the interior side of bowl member 44 and extends into the interior of housing 36. In the electric pump embodiment of Adams' disclosure (Figs. 11-13), elbow means 100 is connected to elbow connector 120, which is in turn connected with male fitting 122, which in turn connects to motor means 124. See Fig. 13:



Also see Figs 11 and 12. 11, which shows bowl member 44 and related structure inside aperture 38:



In the rejections, the Examiner identifies motor means 124 as the alleged “electric pump” of claim 2.⁷ The motor means 124 in addition to air piping elements 100/120/122/124

⁷ On page 8 of the Final Rejection, the Examiner incorrectly asserts that it is Applicant’s position that element 124 is a motor and cannot be considered a pump. To the contrary, it is Applicant’s position that element 124 is an “electric pump.” Applicant simply noted that a combination cannot be an element of a subcombination. On page 2 of the Final Rejection, the Examiner identifies a combination of elements (124/122/120/100) as the “pump body,” and a subcombination (124) as the “electric pump.” However, the claim clearly states that the “pump body” is a portion or feature of the “electric pump.” The Examiner has clarified the reference to element 124 in connection with the “electric

are identified as the alleged “pump body” of the claim. On page 9 of the Final Rejection, the Examiner identifies pump means 42, bowl member 44, and coupling 60 as the alleged “socket” of the claim. The Examiner further states: “at least element 100, 120 could alternately be considered part of the pump or part of the socket.” *Id.*

Applicant first notes that reference number 42 in Adams refers to the pump means, which includes the combined structure of the motor means 124 and the air piping elements 122/120/100/44. Respectfully, if the entire structure of pump means 42 is the alleged “socket,” there is no structure left for the “electric pump.”

Secondly, Applicant notes that even under the Examiner’s position that “at least element 100, 120 could alternately be considered part of the pump or part of the socket,” the Examiner, in applying Adams against the claims, must at some point definitively assert some part of Adams as the alleged “socket” that is “built in the inflatable body” and some other part of Adams as the alleged “pump body” which is “wholly or partially located in socket,” as required by claim 2.

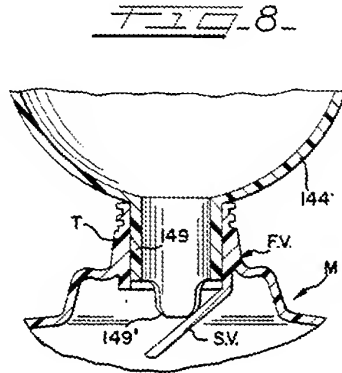
Thirdly, with reference to Fig. 10 of Adams, if it is the Examiner’s position that bowl member 44 and coupling 60 define a “socket” as required by claim 2, and elbow means 100 is considered to be a part of the alleged “electric pump,” it is clear that the only portion of said “electric pump” that is located in said “socket” is the “air outlet” 102. See Fig. 2.

For all of the foregoing reasons, Applicant submits that Adams fails to teach all of the limitations of claim 2 and respectfully requests that the rejection of claim 2 over Adams be withdrawn. Insofar as claim 5 depends from claim 2, Applicant requests that the rejection of this claim over Adams also be withdrawn.

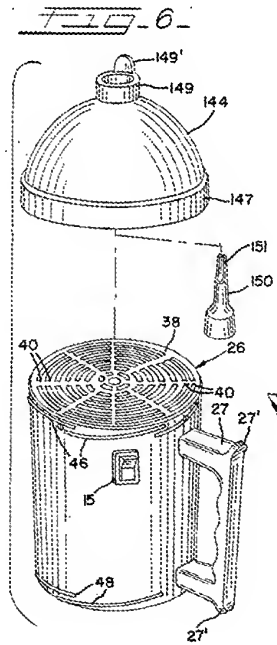
pump” limitation of the claim was intended to communicate only that Adams’ device is electric.

3. Rejection of Claims 2 and 5 over Owen

Owen teaches an inflator 10 comprising housing 26 and nozzle 144. Element 149 is described by Owen as a connector portion of nozzle 144. Fig. 8 of Owen is reproduced below:



The arrangement of Owen's inflator is illustrated in Fig. 6:



The Examiner identifies tubular portion T and inflator 10 as, respectively, the alleged “socket” and “electric pump” of claim 2. The combination of housing 26, nozzle 144, connector portion 149 and adapter 150 are identified as the alleged “pump body.”

On page 11 of the Final Rejection, the Examiner identifies valve-engaging projection 149' is identified as the alleged “air outlet” of the claims. Owens describes valve-engaging projection 149' as follows (at col. 7, lines 1-6):

To this end, the connector portion 149 of the nozzle 144 has provided thereon a valve-engaging projection 149' which is configured to engage and move the safety valve member S.V. attendant to insertion of connector portion 149 into the tubular portion T of the fill valve construction of an inflatable article.

As shown in Fig. 8, projection 149' is a protrusion from the lip of connector portion 149. Respectfully, unless adapter 150 is installed, connector portion 149 is clearly the “air outlet” of Owen's inflator, not projection 149' as stated by the Examiner.

As set forth in Section 1.1, when the claim term “pump body” is accorded its “ordinary and customary meaning” as evidenced by the claim language, dictionary definitions, the specification, and the prosecution history, it clearly refers to the main part of the “electric pump,” separate and distinct from, and specifically not encompassing, the claimed “air outlet” portion of the “electric pump.”

As shown in Fig. 8 of Owen, only “air outlet” 149 is received in the “socket.” “Air outlet” 149 is an extension from detachable nozzle 144, not a portion of the main part of the pump. It is an appendage to the pump that projects away from the main part of the pump. The same reasoning applies to adapter 150.⁸ In fact, connector portion

⁸ On the other hand, when adapter 150 is installed in connector portion 149, it becomes the “air outlet.” As shown in Fig. 1, when the adapter is implement, only the adapter is received in an alleged “socket”.

149/adaptor 150 are essentially identical to the adaptor 38 in Feldman, which was found during the prosecution of the related '469 patent to not be part of the pump body in that reference. See above at Section 1.1.3.

The Examiner argues (at page 10 of the Final Rejection):

The broadest reasonable interpretation [pump body and/or main part] allows the entire structure shown in Fig. 5 including both elements 44 and 26 to be referred to as the pump body. Similarly, the broadest reasonable interpretation of this term allows the entire structure shown in Fig. 6 including both elements 144 and 26 to be referred to as the pump body.

However, the Examiner offers no intrinsic or extrinsic evidence in support of this interpretation. Furthermore, contrary to the Examiner's position, in the context of the language of claim 2, the "pump body" and "air outlet" are separate parts of the "electric pump." Claim 2 requires that the "pump body" be wholly or partially located in alleged "socket" T. Applicant respectfully submits that Owen does not meet this requirement because the only portion of Owen's inflator that is "wholly or partially located" in the alleged "socket" T is the "air outlet."

For all of the foregoing reasons, Applicant submits that Owen fails to teach all of the limitations of claim 2 and respectfully requests that the rejection of claim 2 over Owen be withdrawn. Insofar as claim 5 depends from claim 2, Applicant requests that the rejection of this claim over Owen also be withdrawn.

4. Rejection of Claims 2, 5 and 7 over Chaffee

Chaffee teaches a handheld fluid moving device 100 for inflating inflatable articles. The device includes a fluid transfer orifice 18 protruding away from the main part of the pump and having projection tabs 20 extending there from. See Fig. 1:

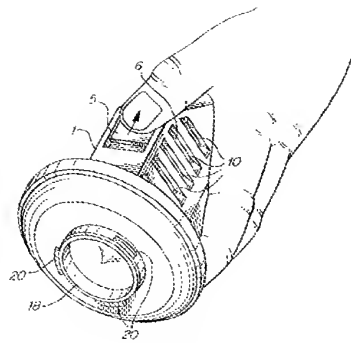


Fig. 1

When an inflatable receptacle 28 is to be inflated with the device, the handheld device is attached to a valve 26 of the inflatable receptacle and activated to move fluid into and pressurize said inflatable receptacle. Col. 6, line 38-col. 7, line 7. In operation, tabs 20 are mated with projections 22 of the inflation valve to provide an airtight connection during inflation, as illustrated in Fig. 5:

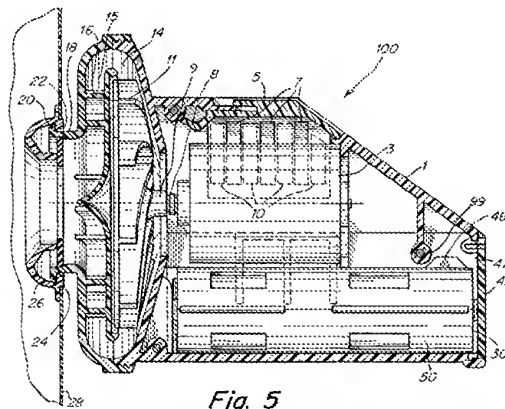


Fig. 5

The Examiner identifies fluid moving device 100 and valve 26, respectively, as the alleged "electric pump" and "socket" of claim 2. The housing 1, including fluid transfer orifice 18 and projecting tabs 20, is identified as the alleged "pump body." The Examiner further states that "[e]ither of the openings or fluid paths (18 or 10) of the pump could be considered an air outlet." Page 11 of the Final Rejection.

As discussed above, Applicant submits that when the claim term “pump body” is accorded its “ordinary and customary meaning” as evidenced by the claim language, dictionary definitions, the specification, and the prosecution history, it refers to the main part of the pump, which is a separate portion of the pump from the “air outlet.”

Fig. 5 of Chaffee clearly shows that the only portions of Chaffee that are “wholly or partially located” in the alleged “socket” 26 are those portions that the Examiner also contends are the “air outlet.” Not only are these portions not part of the main part of the pump, but the claims expressly distinguish between the “pump body” and “air outlet” of the “electric pump,” and require that the “pump body,” not an “air outlet,” be wholly or partially located in alleged “socket” 26. Applicant respectfully submits that Chaffee does not meet this requirement.

On page 11 of the Final Rejection, the Examiner asserts that “the proper and broadest reasonable interpretation of the term “pump body” allows the entire housing as shown in Chaffee to be described as the ‘pump body.’” However, the Examiner offers no intrinsic or extrinsic evidence in support of this interpretation.

The Examiner further asserts that “the applicant has not been able to clearly identify the pump body under his interpretation of the claim limitation with respect to Chaffee.” *Id.* Respectfully, that is incorrect. The “pump body” of Chaffee is the main part of Chaffee’s fluid moving device 100. Furthermore, claim 2 clearly distinguishes between the “pump body” and the “air outlet” as separate and distinct parts of the “electric pump,” and requires that the “pump body” portion be wholly or partially located in the recited “socket.” Thus, the “air outlet” of Chaffee, which the Examiner identifies as “openings or fluid paths (18 or 10),” cannot also be portions of the “pump body” by the claim.

For all of the foregoing reasons, Applicant submits that Chaffee fails to teach all of the limitations of claim 2 and respectfully requests that the rejection of claim 2 over Chaffee be withdrawn. Insofar as claims 5 and 7 depend from claim 2, Applicant requests that the rejection of these claims over Chaffee also be withdrawn.

5. Rejection of Claims 2 and 5 over Rey

Rey discloses a hydro massage pillow including an inflatable plastic bag 20, a rigid framework 16, a heating pulsating assembly 18, a coupling structure 36, and a heater-pump unit 34. The heater-pump unit 34 causes water 14 to be heated up and ejected through water jets 32 of heating pulsating assembly 18 within bag 20. As shown in Fig. 1, heater-pump unit 34 is located in an opening 40 of coupling structure 36. See col. 2, line 56 to col. 3, line 24. Heater-pump unit 34 is for heating and circulating water already contained within the hydromassage pillow. See col. 3, lines 14-19. The pillow is filled with water via access port 124. The opening 40 and coupling structure 36 connect heater-pump unit 34 with the heating and pulsating assembly 18 contained within the pillow.

Applicant respectfully submits that Rey fails to teach or suggest “an electric pump, including a pump body and an air outlet, connected to the socket to pump the inflatable body,” as required by claim 2.

In this regard, the Examiner identifies heating pulsating assembly 18 and coupling structure 36, respectively, as the alleged “electric pump” and “socket” of claim 2. The heater pump mechanism 44 is identified as the alleged “pump body.” The Examiner further identifies the connection between the pulsating assembly and pipe 30 of Rey as the alleged “air outlet.” Page 12 of the Final Rejection.

In particular, the Examiner asserts “the above noted connection between the pump and the pipe 30 is an outlet and that this can clearly be an ‘air’ outlet. The claims do not positively state that the fluid being pumped is air and thus the invention has not been limited to pumping such a fluid.” *Id.*

Respectfully, the claims do positively recite an “air outlet.” On the other hand, the alleged “electric pump” 18 of Rey merely heats and circulates water already contained within the hydromassage pillow. Thus, Rey’s “electric pump” 18 clearly lacks an “air” outlet,” as required by claim 2. In this regard, the Examiner has provided no evidence that Rey’s “pump” for circulating water could also circulate air.

Furthermore, Rey does not teach or suggest a pump arranged “to pump the inflatable body,” as required by claim 2. In this regard, the specification makes clear that “pumping” means either bringing a fluid from outside the inflatable body to inside the inflatable body (i.e., inflating), or bringing a fluid from inside the inflatable body to outside the inflatable body (i.e., deflating). For example, page 9, lines 10-11 of the specification reads: “[t]he user pushes switch 421 of the electric pump 42 to pump outside air into the body 40 of the airbed.” To the contrary, Rey merely heats and circulates a fluid already contained within the hydromassage pillow.

In this regard, Applicant is not importing limitations from the specification. Rather, Applicant has construed the term “to pump” in the context of the specification, as required by *Phillips*.⁹ See also MPEP 2111.01.III. The Examiner has not advanced an alternative construction of the claim term “to pump.”

For all of the foregoing reasons, Applicant submits that Rey fails to teach all of the limitations of claim 2 and respectfully requests that the rejection of claim 2 over Rey be withdrawn. Insofar as claim 5 depends from claim 2, Applicant requests that the rejection of this claim over Rey also be withdrawn.

Rejection of Claim 6 over any one of Adams, Owen, Chaffee or Rey

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Adams, Owen, Chaffee, or Rey. As noted above, it is Applicant's belief that claim 6 is allowable at least by virtue of their dependency from claim 2. Allowance of claim 6 is respectfully requested.

⁹ “[Claims must be read in view of the specification, of which they are a part ... [T]he specification is always highly relevant to the claim construction analysis.” *Phillips* at 1327.

Conclusion

For the extensive reasons advanced above, Appellant respectfully but forcefully contends that claims 2 and 5-7 are patentable. Reversal of all rejections is courteously solicited.

Respectfully submitted,

/Nelson A. Quintero/

Nelson A. Quintero
Attorney for Appellant
Reg. No. 52,143
Customer No. 34,283
Telephone: (310) 909-8535

CLAIMS APPENDIX

2. An inflatable product including:
 - an inflatable body;
 - a socket built in the inflatable body; and
 - an electric pump, including a pump body and an air outlet, connected to the socket to pump the inflatable body, wherein the pump body is wholly or partially located in the socket.
5. An inflatable product as claimed in claim 2, further including a switch connected to the electric pump to actuate the electric pump.
6. An inflatable product as claimed in claim 5, further including a waterproof layer covering the switch to protect the switch from water.
7. An inflatable product as claimed in claim 2, wherein the air outlet is connected to the inflatable body via the socket.
8. An inflatable product as claimed in claim 2, wherein the air outlet is connected to the inflatable body via the socket.

EVIDENCE APPENDIX

Attachment A: Definition of “body” entered the Appellant’s response filed on July 6, 2009.

RELATED PROCEEDINGS APPENDIX

Attachment B: Decision on Appeal, Appeal No. 2008-0762 (July 28, 2008)

Attachment A

Appl. No. 10/647,814

Examiner: Freay, Charles, Art Unit 3746

In response to the Office Action dated March 4, 2009

Date: July 6, 2009

Attorney Docket No. 10111953

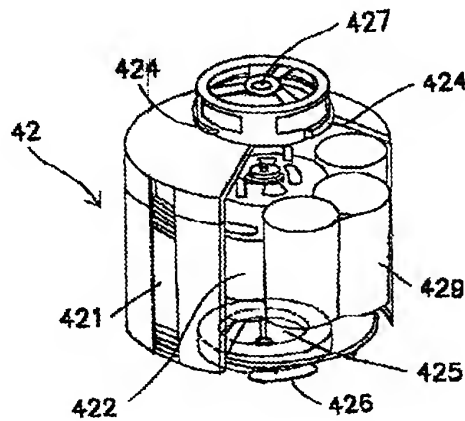
1.1.2. Dictionaries

The ordinary and customary meaning of “pump body” is the main part of the pump. See *The American Heritage Dictionary of the English Language* (2000) (defining “body” as “[t]he main or central part.”); *Webster’s Ninth New Collegiate Dictionary* (1991) (defining “body” as “[t]he main, central, or principal part.”).

1.1.3. Specification

The ordinary and customary meaning of “pump body” is also fully consistent with the specification. The straightforward distinction drawn in the claim language between the “pump body” and the “air outlet” as separate components of the “electric pump” as a whole is readily apparent from the specification.

As an example, Fig. 8B of the application is reproduced below:



As described on page 8, lines 14-16, the air outlet 425 is a separate protruding portion of the housing of the electric pump 42:

Attachment B

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHENG CHUNG WANG

Appeal No. 2008-0762
Application No. 10/647,814
Technology Center 3700

Decided: July 28, 2008

Before WILLIAM F. PATE, III, JENNIFER D. BAHR and JOHN C. KERINS,
Administrative Patent Judges.

PATE, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal from the final rejection of claims 1, 2 and 5-8. These are the only claims in the application. We have jurisdiction under 35 U.S.C. §§ 134 and 6(b) (2002).

The claimed invention is directed to an inflatable bed including a socket and electric pump received in the socket. Claim 2 reproduced below, is further illustrative of the claimed subject matter.

2. An inflatable product including:
an inflatable body;

a socket built in the inflatable body;

an electric pump, including a pump body and an air outlet, connected to the socket to pump the inflatable body, wherein the pump body is wholly or partially located in the socket; and

a connector provided at a predetermined position of the electric pump for connecting an external power to actuate the pump.

Claims 1 and 2 stand rejected under 35 U.S.C. § 102 as anticipated by Wortman.

Claims 1, 2, 5, 7 and 8 stand rejected under 35 U.S.C. § 102 as anticipated by Higgs.

Claims 6 stands rejected under 35 U.S.C. § 103 as unpatentable over Higgs in view of Infante.

The references of record relied upon by the Examiner as evidence of obviousness and anticipation are:

Higgs	US 5,249,319	Oct. 5, 1993
Infante	US 5,297,545	Mar. 29, 1994
Wortman	US 5,794,289	Aug. 18, 1998

OPINION

We have carefully reviewed the rejections on appeal in light of the arguments of the Appellant and the Examiner. As a result of this review we have reached the conclusion that the applied prior art does not establish the lack of

novelty or the obviousness of the claims on appeal. Accordingly, the rejections on appeal are reversed. Our reasons follow.

Turning to Appellant's first argument regarding the construction of the claimed subject matter, we do not agree with Appellant that an inflatable body should be construed as a body that is substantially sealed. Nonetheless, we reverse the rejections on appeal because the applied references of Wortman or Higgs do not show a socket built into an inflatable body.

First of all, we cannot construe the beds of Wortman and Higgs in their entirety or as a whole to be the inflatable body as called for in the claims. With respect to Wortman, the inflatable bodies are clearly the air cells. For example, the inflatable bodies in Wortman's Figure 1 are the air cells 44 and 46. The bed as a whole cannot be construed as an inflatable body, as the entire bed does not inflate. In fact, Wortman discloses a foam framework for the air cells that Wortman terms as cribs 34 and 36. See col. 6, ll. 10-32. Therefore, the placement of the pump in notch 63 as shown in Figure 15 can not be considered as a socket built into the inflatable body, in this case air cell 44 or 46.

Likewise with respect to Higgs, we cannot construe the hollow compartment 22 which contains the blower housing 24 of Higgs as a socket in the inflatable body 28 of Higgs. The inflatable portion of Higgs is clearly the plenum 28 which is surrounded by foam liner panels cemented together. (Higgs, col. 2, ll. 46-55). The socket--hollow compartment 22--is formed by a cavity created in the foam and bounded on one side by plenum 28. Thus, neither Higgs nor Wortman teaches or suggests a socket with a built-in pump in an inflatable body.

The disclosure of Infante cannot remedy the defects we have found in the rejections based on Wortman and Higgs. Consequently, all rejections on appeal cannot be sustained.

SUMMARY

The rejection of claims 1 and 2 under 35 U.S.C. § 102 as anticipated by Wortman is reversed.

The rejection of claims 1, 2, 5, 7, and 8 under 35 U.S.C. § 102 as anticipated by Higgs is reversed.

The rejection of claim 6 under 35 U.S.C. § 103 as unpatentable over Higgs in view of Infante is reversed.

REVERSED

JRG

QUINTERO LAW OFFICE, PC
2210 MAIN STREET, SUITE 200
SANTA MONICA, CA 90405